

Carson River Watershed
Boundary Map

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The Flow

Delivering News from the Carson River Watershed Community

Spring 2013

CRC Environmental Education Roundtable: Developing Effective Program Measures

By Steve Lewis, University of Nevada Cooperative Extension

How successful are you as an environmental educator? What difference are your programs making? Are people changing as a result of your programs in what they know and how they behave? And, ultimately, has your programming improved environmental conditions? These are fundamental questions all those in environmental education must ask and find creative ways to answer. It all comes down to accountability to funders, participants, and us – the individual educators. The CRC Education Working Group members found themselves asking these questions

Cooperative Extension, delivered the keynote presentation entitled “Moving Beyond Awareness: The ‘So What’



A spokesman from each group reported on their “breakout sessions”.



Small groups work on evaluation components.

and designed a day-long workshop on February 6 in the beautiful Old Assembly Chambers at the State Capitol to help others improve their program evaluation skills.

Dr. Sue Donaldson, Water Quality Specialist, University of Nevada

Factor.” Successful program evaluation begins with planning and planning precedes program implementation. Sue shared a Logic Model on the NEMO program and talked about how the planning she invested in the project from the onset established a firm foundation for program evaluation as well as implementation.

Roundtable participants broke into seven small groups and worked on evaluation components for existing environmental education programs. The “guinea pig” programs included Sierra Nevada Journeys Watershed

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CLEAR CREEK MULTI-JURISDICTIONAL HAZARDOUS FUELS REDUCTION PROJECT

By Washoe Tribe of Nevada and California, Washoe Environmental Protection Department

Project Description:

The Washoe Tribe, in partnership with the US Forest Service – Carson Ranger District and Nevada State Parks, is beginning implementation of its portion of the Clear Creek Multi-jurisdictional Hazardous Fuels Reduction Project. The project received funding through the Southern Nevada Public Lands Management Act (SNPLMA) Round 9 program.

Clear Creek is at increased risk to catastrophic wildland fire. Effective fire suppression, repeated drought cycles, insect infestations, and tree diseases have combined to produce an unhealthy ecosystem susceptible to devastating wildland fires. The area contains dense brush understory, significant ladder fuels, overstocked forest stands, expanding areas infected with dwarf mistletoe and stem rusts, extensive down and standing dead trees, and brush and conifer invaded aspen stands. Previous wildland fires in the area have burned erratically with devastating results.



Project Goals:

- Restore culturally important native vegetation
- Improve ecological function and health
- Reduce risk of catastrophic wildland fire
- Reduce hazardous fuel loading
- Protect natural and cultural resources, watersheds, and communities.



Grant funding was utilized to obtain a contractor to perform the project activities.



Treatments:

CTL Forest Management was contracted to complete thinning treatments on the Upper Clear Creek Parcel. Mechanical thinning was completed in fall 2012. Trees up to 29" dbh were thinned utilizing a ground based tractor system. Hand thinning will be completed in the meadows and aspen stands. Landings and temporary roads will be rehabbed and reseeded this spring.

Approximately 60 cords of fuel wood was provided to the tribe. Approximately 350 poles will be provided to the Tribe for construction of a round house.

Changes to the CWSD Board of Directors

By Debbie Neddenriep, Carson Water Subconservancy District

We want to recognize and thank all the board members whose terms ended in December 2012, Andy Aldax—Douglas County Agriculture Representative, Tom Sweeney—Alpine County, Mike Olson—Douglas County, Chuck Roberts—Lyon County, and Pete Olsen—Churchill County. We appreciate their thoughtfulness, insightfulness, and tireless efforts on behalf of the Carson River Watershed. Best wishes to all in their future endeavors.

As of January 2013, five new board members joined CWSD's Board of Directors, Mary Rawson—Alpine County, Barry Penzel—Douglas County, Ray Fierro—Lyon County, and Carl Erquiaga—Churchill County. In addition, Don Frensdorff has filled Andy Aldax's position as the Douglas County Agriculture Representative. Please visit the CWSD website to learn more about each of our [new board members](#). We look forward to their fresh viewpoints and appreciate their willingness to serve on CWSD's board.

2013 Andy Aldax Award presented to the Minor Family of Dayton Valley

By Toni Leffler, Carson Water Subconservancy District



Andy Aldax presents the Minor Clan with the award while CWSD Board President Ernie Schank looks on.

Carson Water Subconservancy District is pleased to announce the Minor Family of Dayton, Nevada, has received the 2013 Andy Aldax Award for exemplary service in conservation and protection of the Carson River Watershed. Created in 2007, this award recognizes individuals or organizations for significant contributions in promoting and achieving the Carson River Watershed Vision Statement. Nominated for demonstrating watershed conservation, community leadership, on-the-ground education and conservation projects, the Minor Family has been hard at work for 64 years. Three generations of Minor Family members, patriarch Gene (deceased) and matriarch Delphine, with son Tom, and daughters Mary and Julie, and all of their respective families, have donated over 3,000 volunteer

hours toward conservation efforts in the Carson River Watershed. The family has actively participated in multiple community boards, authored state legislation, received 4-H Leader of the Year (Delphine), and lead numerous tours of their Dayton Valley ranch to demonstrate conservation measures. They even host the annual community Easter Egg Hunt. In her nomination letter, Linda Conlin, River Wranglers President, stated, *"The Minor Family Ranch not only supports the vision of the Carson River Coalition, Tom actively participated in developing our vision. The Minor Family is one of the founding families of the Middle Carson River Carson River Management Planning Group (CRMP) and the formation of the Dayton Valley Conservation District. Generous with their time and resources, the Minor Family Ranch practices conservation, education, and service to community."* CWSD is grateful for their many years of dependable and enthusiastic service to the entire Carson River Watershed.

Conserve Carson River Work Day Creates Change!

By Linda Conlin, Nevada River Action Team

For nearly two decades, elementary 4th graders and teen mentors have worked side-by-side on the banks of the Carson River. They explored the concept of watershed and learned about pollution, created water cycle bracelets, tested water quality, and learned how animals adapt to their surroundings by using activities *Ernie the Invertebrate* or *Build a Beaver*. They worked together to wrap cottonwood trees to protect them from beaver, install wood duck nest boxes and bat houses, and plant thousands and thousands of willows along the river bank.



FFA student from Douglas High works with elementary 4th graders from Gardnerville Elementary at The Nature Conservancy River Fork Ranch. Paul Pugsley, CVCD, offers technical assistance. *Photo Courtesy of Nevada River Action Team*

In 2012, the 18th anniversary of Conserve Carson River Work Days, I asked elementary kids why we do this field trip with them. “What do we want you to learn?” I asked them when I visited their classrooms after the field trip.

“You want us to learn about the river and how we can take care of it,” answered one eager student. “You want us to conserve water,” chimed in another. “We need to stop pollution,” said a third. Another student laughed as he said, “You want us to have fun!” “Yes, you’re all on the right track!” I responded.



Silver Stage High School biology student teaches about the importance of dissolved oxygen to students from Riverview Elementary at the Minor Family Ranch. *Photo Courtesy of Nevada River Action Team*

Interested in challenging the students and taking it to another level, I invited them to make changes in their lives to reduce their impact on our watershed. Each student made a choice to do one thing at home, at school and when they are out and about so they can become Carson River Stewards. They plan to bring refillable water bottles to school instead of using plastic bottles or use the back-side of paper for rough drafts or scratch paper. They agreed to pick up their

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Right: The Shovel Brigade - Dayton High School science students take a short break after working with elementary students from Sutro Elementary School. *Photo Courtesy of Nevada River Wranglers*



Jennifer Harris stakes willow bundles to the stream bank at Conserve Carson River Work Day 2012.

Photo Courtesy of Nevada River Wranglers



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dog's poop or leave parks and river access cleaner than it was when they arrived. They want to try using cloth napkins and sponges instead of paper napkins and paper towels at home or take five minute showers or turn off water when brushing teeth. The Conserve Carson River Work Day impacts their lives in a significant way and we plan to continue this watershed event for years to come.

They went to the river, got the t-shirt and made the commitment. Won't you follow their lead?

Mark Your Calendars

What: Carson River Festival
When: June 22, 2013
Time: 9:00 AM— 3:00 PM
Where: Old Town Dayton at Oodles of Noodles

What: Main CRC Meeting
When: May 13, 2013
Time: 9:00 AM— 12:00 PM
Where: Sierra Room, Carson City Community Center
Tentative Topic: Floodplain Issues



Hope Valley Meadow Stewards: Contributing to Restoration Planning Efforts on Upper West Fork Carson River

By Chris Katopothis, Alpine Watershed Group

The West Fork of the Carson River starts as a small mountain stream flowing out of the Lost Lakes along the Sierra crest near Carson Pass, and meanders down the Eastern slope of the Sierra into Hope Valley Meadow. Within the Hope Valley reach, the river has been joined by several smaller tributary streams and provides flows able to support the well-known trout fishery in Hope Valley. However, the river in this reach does not function to support self-sustaining wild fish populations or adequate riparian habitat for wildlife. The upper West Fork Carson River is also an ongoing source of abundant clean water for downstream users.

In part due to various historical and ongoing recreational uses, the stream channel in large portions of Hope Valley Meadow is incised and down cutting the channel. This results in the river losing connection to its natural floodplain areas in the meadow. Riparian vegetation is present only intermittently, leading to unstable banks, a lack of complex in-stream habitat and limited cover for fish and wildlife.

Starting in 2011, American Rivers, a non-profit working to protect and restore the nation's rivers and streams, is leading a multi-partnership effort to assess restoration needs in Hope Valley Meadow. Design plans focus on improving hydrologic function and wildlife habitat within the meadow. The overall goal of the Hope Valley Restoration Project is to restore the full range of ecosystem services to this highly-visible and well-known meadow. These services include natural water storage, flood attenuation, cooling and filtering of water, aquatic and riparian habitat, and recreational values.

Alpine Watershed Group (AWG) in partnership with Friends of Hope Valley and American Rivers, is recruiting and training volunteer "Meadow Stewards" interested in helping with water quality monitoring, streamflow monitoring, and photo monitoring in Hope Valley. Field training began in May 2012, with a number of

outings and data collection conducted through the 2012 field season. Meadow Stewards learn to measure river flow using United States Geological Survey approved equipment, and to maintain and download data collected by digital loggers at each monitoring site. Information collected by Meadow Stewards helps inform the restoration planning process, but most importantly, this information establishes baseline data for surface water characterization before any potential restorations are implemented.



Meadow Stewards measuring West Fork Carson River water levels in Hope Valley.
Picture Courtesy of Alpine Watershed Group

The 2013 Meadow Stewards field season begins May/June and will continue into fall, as weather and flow conditions permit. We welcome new volunteers! Training is provided to anyone interested in contributing to the monitoring efforts in Hope Valley. Come join the Hope Valley Meadow Stewards team and enjoy this beautiful and unique Sierra Nevada meadow while gathering valuable information that supports the meadow restoration.

Learn more about the project at www.alpinewatershedgroup.org. To volunteer in the field, please contact Chris at 530-694-2327 or awg.chris@gmail.com.

(Continued from page 1)

Education, Nevada Recycles, Schoolyard Habitats, Eagles & Agriculture, Explore Your Watershed Conservation Tours, Project Wet, and the Alpine Watershed Group Citizen's Monitoring. The first breakout session was to write program outcomes, describing learning, action, and conditions as a result of the program. Next we practiced writing SMART (specific, measureable, attainable, relevant, time-bound) goals. Completing the participation, activities, and program investments was the work of the third breakout session. And finally, the small groups developed strategies to measure and convey program results.

In addition to these hands-on exercises, we heard from Andre DeLeon, Nevada Department of Education, who talked about the next generation science standards. Sonya Sistare, University of Nevada Cooperative Extension, shared evaluation approaches used to measure the Living With Fire Program. Throughout the course of the day, participants were able to contribute feedback via handheld response devices also known as clickers. These devices helped demonstrate the value and utility of immediate program evaluation. For instance, 90 percent of the attendees indicated by clicker feedback they would change the way they evaluate their program(s) as a result of what they learned at the Roundtable. A follow-up survey will be conducted in three months to determine longer-term impacts. Network opportunities were provided by way of breaks, display sharing and a giveaway flash drive with detailed information on environmental education programs throughout the Carson River Watershed. Thank you to all who participated and helped organize this successful event.

Congratulations to Dr. Susan Donaldson 2013 Wendell McCurry Award Recipient!

We appreciate all Dr. Donaldson has done to educate the public about nonpoint source pollution throughout Northern Nevada and want to acknowledge this well deserved honor.

To learn more about Dr. Donaldson's work and this prestigious award, [see the full press release on the Nevada Division of Environmental Protection \(NDEP\) website at <http://ndep.nv.gov/admin/wendell13.htm>](http://ndep.nv.gov/admin/wendell13.htm)

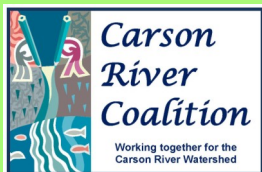


Colleen Cripps, Administrator, NDEP; Dr. Susan Donaldson; and Mr. Dave Gaskin, Deputy Administrator, NDEP. Photo courtesy of Mary Kay Wagner, NDEP

FOR
INFORMATION
ON REGULARLY
SCHEDULED
MEETINGS VISIT
www.cwsd.org

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Thanks to these
Contributors!
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Debbie Neddenriep
Linda Conlin
Steve Lewis
Toni Leffler
Washoe Tribe of NV
& California



This newsletter has been
developed in part with
Clean Water Act 319 (h)
funds from the Nevada
Division of Environmental
Protection.



Upcoming Events

Earth Week Events at Fallon Paiute Shoshone Tribe:

April 24—27, 2013. For a complete
schedule email [Carmen Gonzales](mailto:Carmen.Gonzales@fallontribe.org) or
call 775.423.0590.

CRC Main Meeting: May 13, 2013,
9:00am - 12:00 pm. See AD on page 5
or for more information email [Brenda
Hunt](mailto:Brenda.Hunt@carsonwater.org) or call 775.887.9005.

**Grazing & Weed Management
Workshop:** May 18, 2013, 8:00 am -
3:00 pm, River Fork Ranch, 381 Genoa
Lane, Genoa. Email [Jamie Greer](mailto:Jamie.Greer@carsonwater.org) or call
775.353.3640 to learn more.

Spring Wings at Stillwater Na- tional Wildlife Refuge:

May 17-19, 2013. This is an awesome
event! Go to www.springwings.com
(after 3/18) to register, or email [Susan
Sawyer](mailto:Susan.Sawyer@springwings.com) for more information
775.423.5128, ext. 228



Carson River
Get on the
Bus
Watershed
Tour 2013

June 12 & 13, 2013
8:30 a.m.—4:30 p.m.

Headwaters to the Terminus

Carson River Coalition and Carson Water
Subconservancy District invite you to join
us for these informative days sharing
programs, projects, and studies accom-
plished throughout the watershed. Hear
about noxious weeds, aquatic invasive
species, river projects and what's on the
horizon!

**Download a registration form at
www.cwsd.org . Send via fax/email
775.887.7457 / kathi@cwsd.org**

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